



(12) **United States Patent**  
**Sirito-Olivier et al.**

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(54) **RECONFIGURABLE OUTPUT STAGE**

(58) **Field of Classification Search**

(71) Applicant: **Optis Circuit Technology, LLC**, Plano, TX (US)

CPC .... H04R 5/04; H04R 1/1041; H04R 2420/03; H04R 2420/01; G10K 11/1786; (Continued)

(72) Inventors: **Philippe Sirito-Olivier**, Saint Egreve (FR); **Patrizia Milazzo**, S. Agata Li Battiati (IT); **Angelo Nagari**, Grenoble (FR)

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(73) Assignee: **OPTIS CIRCUIT TECHNOLOGY, LLC**, Plano, TX (US)

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 24 days.

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§ 371 (c)(1),  
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*Primary Examiner* — George Monikang

(74) *Attorney, Agent, or Firm* — The Danamraj Law Group, P.C.; Thomas L. Crisman; Kenneth A. McClure

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(57) **ABSTRACT**

An output stage configuration with four configurable input/output terminals and four switches is specified. Each switch has a first main terminal, a second main terminal and a control terminal, which receives a control signal for controlling the open or closed state of the switch. The output stage is included in a circuit together with a first control apparatus and a second control apparatus. When a control stage of the first control apparatus is connected to the output stage, a control stage of the second control apparatus is electrically disconnected from the output stage, and the output stage operates in a first operating state. When the control stage of the second control apparatus is connected to the output stage, the control stage of the first control apparatus is electrically disconnected from the output stage, the output stage then operating in a second operating state.

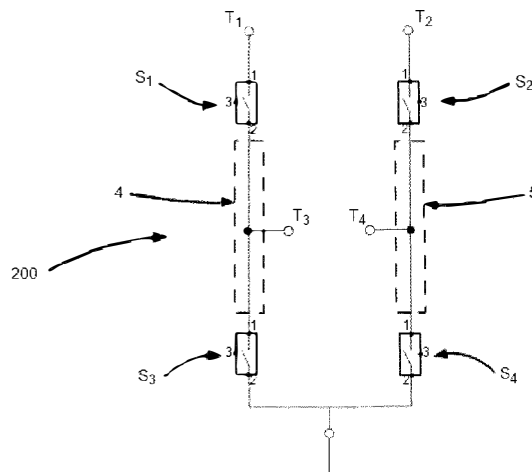
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**H04R 3/12**                   (2006.01)  
(Continued)

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CPC ..... **H02M 3/158** (2013.01); **H03F 3/2173** (2013.01); **H03F 3/2175** (2013.01)

**15 Claims, 4 Drawing Sheets**



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*H02M 3/158* (2006.01)  
*H03F 3/217* (2006.01)
- (58) **Field of Classification Search**  
CPC .. H03F 3/217; H03F 3/2173; H03F 2200/249;  
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2203/7231  
USPC ..... 381/28, 80-81, 84-85  
See application file for complete search history.

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FIG. 1

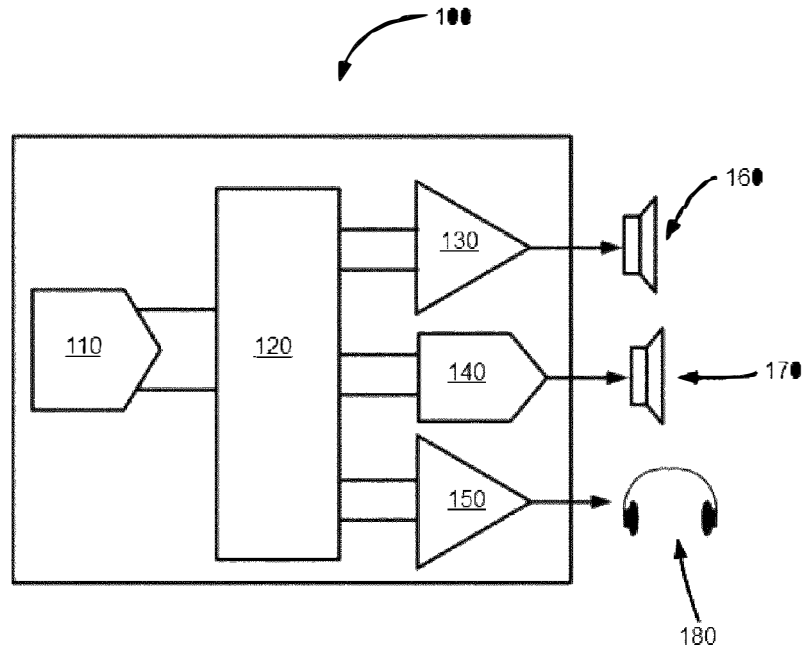


FIG. 2

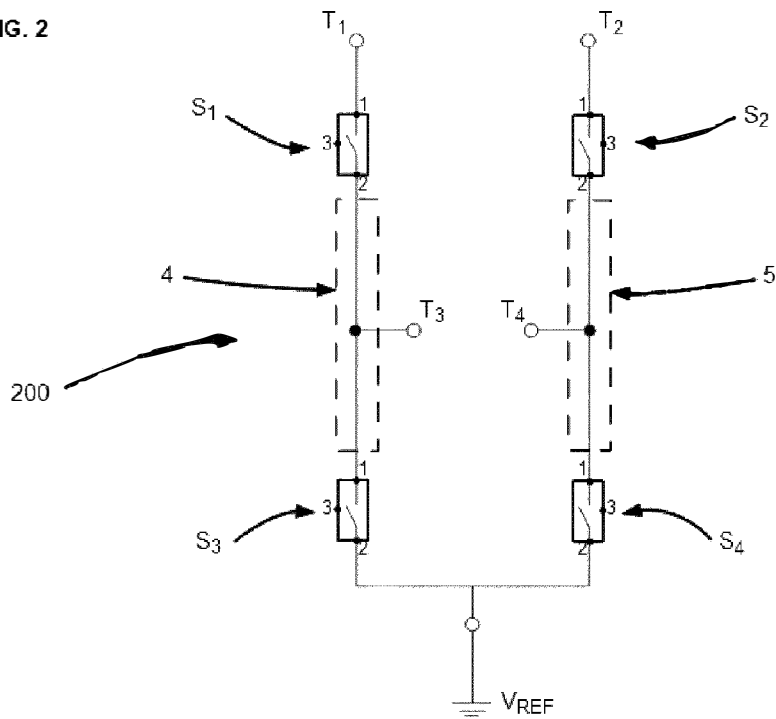




FIG. 5

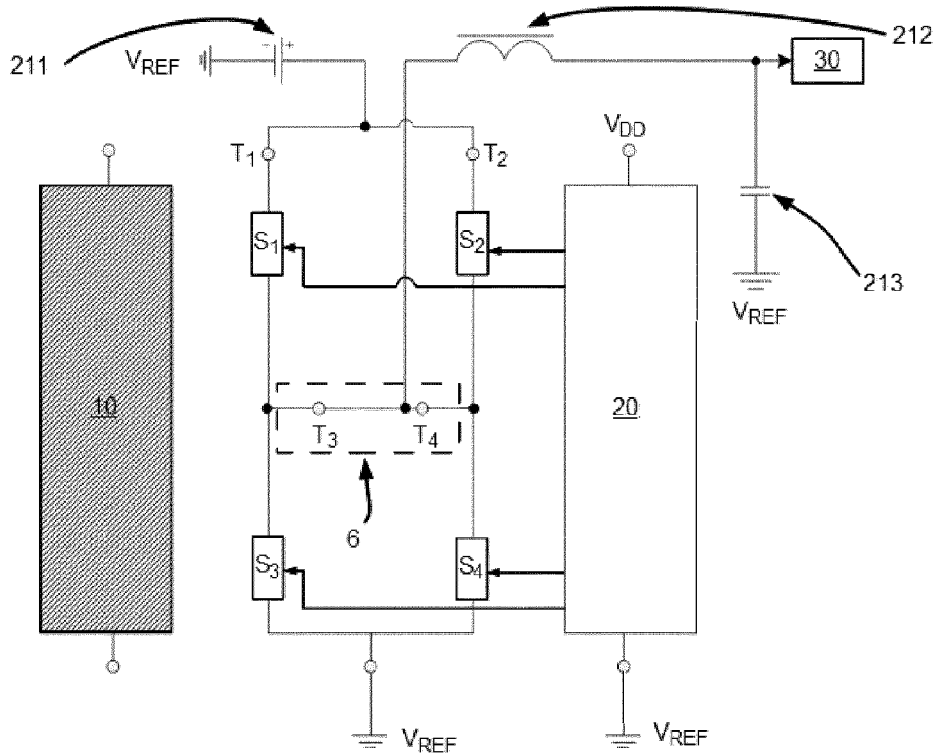
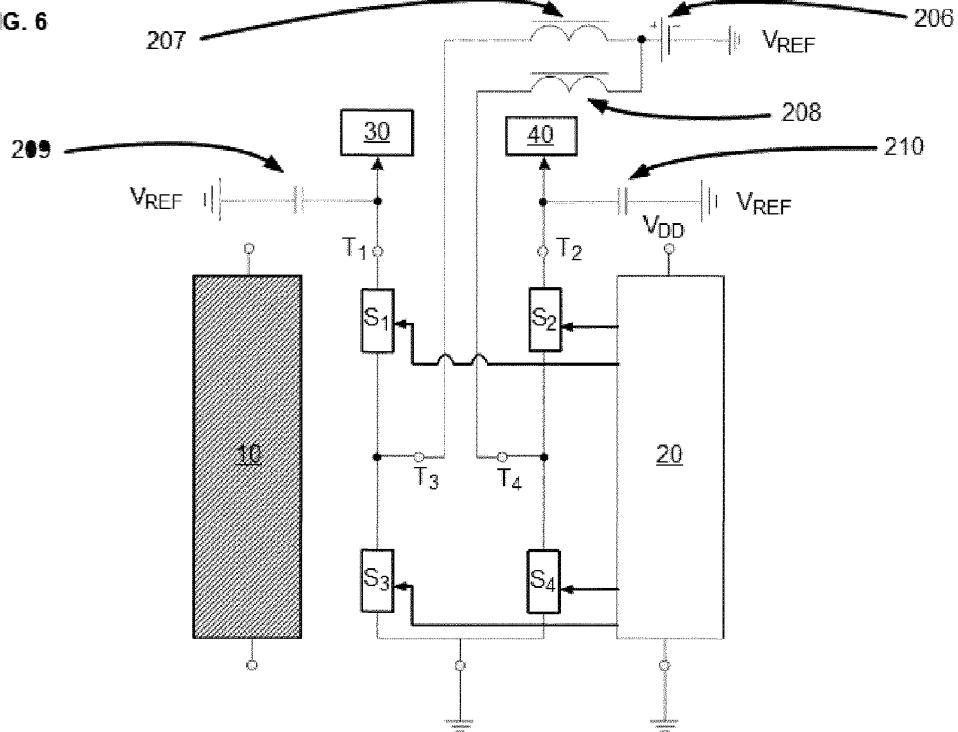


FIG. 6



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